

**I. Cover Page**

**DEPARTMENT OF TRANSPORTATION**

**Federal Railroad Administration**

Notice of Funding Opportunity for Consolidated Rail Infrastructure and Safety Improvements

AGENCY: Federal Railroad Administration (FRA), Department of Transportation (DOT)

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**TF Green Airport Intercity Rail Service Preliminary Engineering**

Lead Applicant and co-applicant (s):.....Rhode Island Department of Transportation

Project Track:.....2

Will this project contribute to the Restoration or Initiation of Intercity Passenger Rail Service?.....No

Federal grant application previously submitted for this project: .....No

National Environmental Policy Act (NEPA) Stage:.....EA FONSI (1999), potential reevaluation needed

Rural Project:.....No

Project Location:.....Warwick, Rhode Island

Urbanized Area:.....Providence, RI-MA

UZA Population:.....1,190,956

Project Programs:      2017 Feasibility Study for Intercity Rail Service to TF Green Airport  
                                Northeast Corridor Commission FY2019-2023 Capital Investment Plan  
                                SFY 2019 State Unified Planning Work Program  
                                2014 Rhode Island State Rail Plan  
                                2013 Warwick Comprehensive Plan  
                                2011 State Airport System Plan  
                                2002 TF Green Airport Master Plan Update  
                                2016 Federal Railroad Administration NEC Future Preferred Alternative

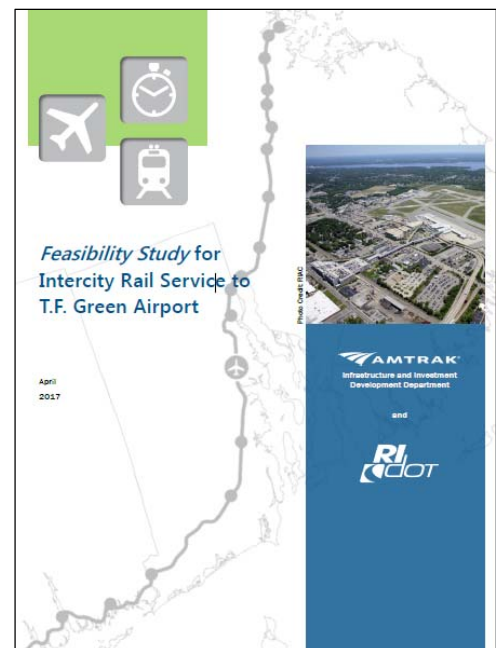
DUE: [www.Grants.gov](http://www.Grants.gov), 5:00 p.m. EDT, on October 12, 2018



## II. Project Summary:

This project will advance preliminary engineering (PE) and environmental review for a new Amtrak stop at the existing TF Green Airport commuter rail station in Warwick, Rhode Island. TF Green Airport is the only one of three international airports adjacent to Amtrak's Northeast Corridor (NEC) without intercity (i.e.- Amtrak) rail service, and it is also one of the few airports within walking distance of an intercity rail service corridor. Instituting Amtrak service at TF Green will increase its competitiveness with other comparable airports on the NEC and regional airports in New England, improve the accessibility of the airport by potential flyers (particularly south/west of Warwick), will reduce vehicles to the region's already congested roads, and further the full potential of transit-oriented development around the station.

Through this project, the State of Rhode Island, in partnership with Amtrak, is advancing the preferred alternative identified by the Federal Railroad Administration's (FRA) 2017 *Feasibility Study for Intercity Rail Service to TF Green Airport*. The PE will design the infrastructure necessary to bring electrified, intercity service to TF Green, including platform(s), a Track 4 siding, interlockings, catenary, crossovers, passenger station space, and pedestrian circulation between platforms. This phase of the project will also include an approved NEPA document, which may entail revision to the 1999 Environmental Assessment and Finding of No Significant Impact (FONSI) or a categorical exclusion.



This project also furthers the goal of Senate Report 114-75 of the Transportation, Housing and Urban Development, and Related Agencies Appropriations bill for Fiscal Year 2016 to promote intercity rail and airport connections on the NEC mainline.

### III. Project Funding

Preliminary engineering for this project will cost \$3,500,000. RIDOT will provide a 20% match with State funds.

Task No.	Task name/project component	Cost	Percentage of Total Cost
1	Detailed Project Work Plan, Budget, and Schedule	\$0.05 M	1.4%
2	Preliminary Engineering (30% Design)	\$3.0 M	86%
3	Environmental Review	\$0.44 M	13%
4	Final Performance Report	\$0.01 M	0.3%
	<b>Project Cost</b>	<b>\$3.5 M</b>	<b>100%</b>
	Federal Funds Received from Previous Grant	\$0.0	0%
	CRISI Federal Funding Request	\$2.80 M	80%
	Non-Federal Funding/Match	Cash: \$0.70 M	20%
	Portion of Non-Federal Funding from the Private Sector	\$0.00	0%
	Portion of Total Project Costs Spent in Rural Area	n/a	n/a
	Pending Federal Funding Requests	n/a	n/a

Previous expenditures on this project include \$500,000 contributed by RIDOT to develop the 2017 *Feasibility Study for Intercity Rail Service to TF Green Airport* in collaboration with Amtrak and the FRA. Additionally, during 2018, RIDOT has allocated an additional \$500,000 to advance the capital infrastructure planning to 10% design during in cooperation with Amtrak. Funding from CRISI will allow RIDOT to advance the project from 10% to 30% design and complete NEPA.

### IV. Applicant Eligibility

The State of Rhode Island Department of Transportation (RIDOT) is the cognizant State agency charged with implementation and oversight of transportation projects. RIDOT's authorized representative is Director Peter Alviti, Jr., P.E.

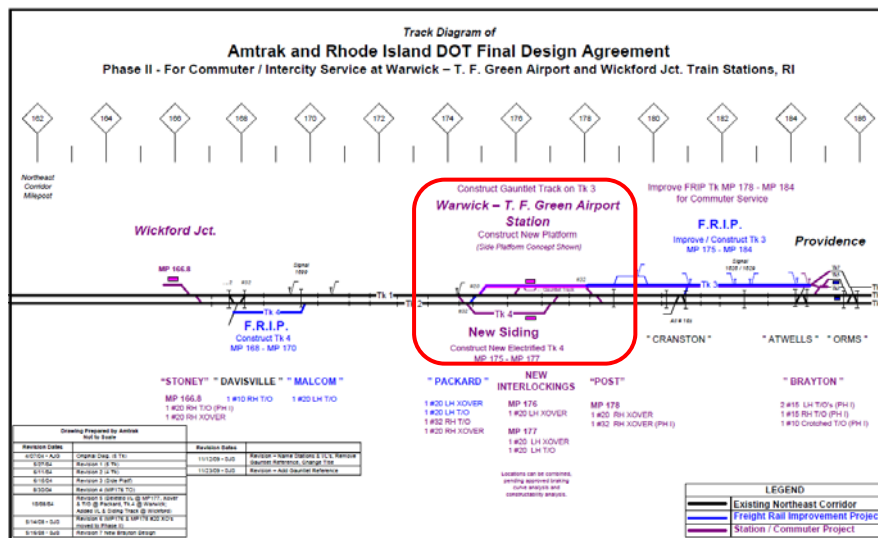
### V. Project Eligibility

The project is eligible as a "project necessary to enhance multimodal connections or facilitate service integration between rail service and other modes, including between Intercity Rail Passenger Transportation and intercity bus service or commercial air service" per Section C(3)(a)(ix) of the Notice of Funding Opportunity. This project will facilitate seamless transfers between Amtrak's intercity rail service, MBTA commuter rail service, RIPTA bus service, and domestic and international flights at TF Green Airport.

### VI. Detailed Project Description

With the December 2010 opening of the TF Green Airport station in Warwick, Rhode Island, a third air-to-rail connection opened along the Northeast Corridor, joining Baltimore/Washington International Airport (BWI) in Maryland and Newark International Airport (EWR) in New Jersey. Both BWI and EWR are served by commuter rail and

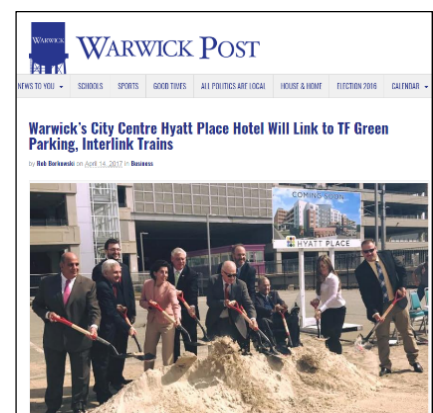
Amtrak intercity rail. TF Green Airport is served by MBTA commuter rail service but not Amtrak intercity rail service. For Rhode Island, the initiation of commuter rail service at TF Green was Phase 1 of a 2-phase plan for rail service at the airport. In anticipation of Phase 2, construction of the train station in Phase 1, which is also known as the Interlink, included parking capacity for intercity rail service and reserved space for a fourth (eastbound) track and an Amtrak station building. Phase 2, as agreed upon by Amtrak and RIDOT, involved constructing the necessary infrastructure to bring intercity rail service to the Airport.



RIDOT/Amtrak 2009 agreement for Phase 2 of passenger rail at TF Green Airport

A requirement in Senate Report 114-75 of the Transportation, Housing and Urban Development, and Related Agencies Appropriations bill for Fiscal Year 2016 to promote intercity rail and airport connections on the NEC mainline led RIDOT and Amtrak, with support from FRA and the Rhode Island Airport Corporation (RIAC), to prepare the 2017 *Feasibility Study for Intercity Rail Service to TF Green Airport*. The study found that bringing intercity service to TF Green Airport is feasible and, compared to the other options considered for increasing rail service at the airport, the least expensive. Amtrak and RIDOT recently commenced the next step in this process, which is a more detailed analysis of the infrastructure and capital costs associated with bringing intercity service to TF Green. This analysis is intended to be a precursor to preliminary engineering and updated environmental impact studies.

Since commuter rail began serving TF Green Airport, the City of Warwick, RIDOT, and RIAC, which owns the airport and train station, have committed themselves to initiatives that will increase demand for transit at the airport. In 2012, the City of Warwick adopted the Warwick Station Development District Master Plan, which established a vision of high-density transit-oriented development (TOD) around the train station. The City changed its zoning to support TOD, branded the area City Centre Warwick, and is actively marketing development opportunities around the train station. RIDOT recently completed a majority FHWA-funded project to construct general roadway and pedestrian improvements on Coronado Road, which is adjacent to the airport train station and is the only through local east-west street connecting all areas of City Centre Warwick and its primary thoroughfares, Jefferson Boulevard and Post Road. And RIAC recently completed a \$250 million runway extension that will allow larger planes to serve the airport on international and cross-country routes.<sup>1</sup> Passenger traffic



The new Hyatt Hotel benefits from a covered connection to the TF Green train station

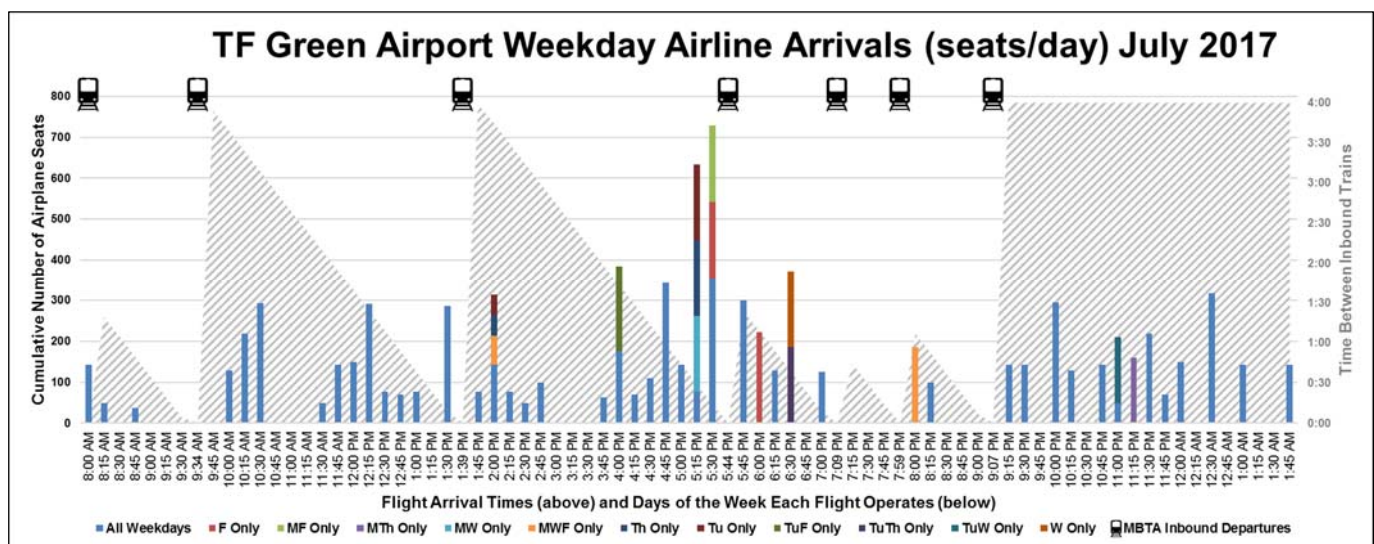
<sup>1</sup> <http://www.pvdairport.com/corporate/construction>



at the airport has already increased nearly 20% between June 2017 and June 2018 and year to date.<sup>2</sup>

The runway extension has already attracted international airlines to the airport. The international passengers arriving at TF Green, especially those from Europe, tend to be inclined to take transit from Warwick to other regional destinations. In fact, RIDOT attributes the recent increase in evening commuter rail boardings at TF Green Station to international passengers traveling to Providence and Boston.

In spite of these substantial investments to the airport and its environs, the ultimate success of TF Green and City Centre Warwick has progressed more slowly than desired. A contributing factor is passenger rail service that does not operate frequently on weekdays or at all on weekends and does not cover much of the airport's passenger catchment area, which extends west along the NEC to New Haven. And demand for residential development at City Centre Warwick, which the City strongly desires to make the neighborhood truly mixed-use and vibrant, needs frequent rail service that connects residents to employment, cultural, educational, and recreational opportunities in Boston, New York, and Providence.



All arrival airplane seats at TF Green Airport by day of week overlaid with the MBTA Commuter Rail Schedule of trips to Providence and Boston

Adding intercity service to TF Green Airport will greatly reduce these challenges and directly improve the experience of expected users (City Centre Warwick TOD residents and employers; and airport passengers and employees). These expected users are among the many beneficiaries of this project, which also include Amtrak, the City of Warwick, MBTA, RIAC, and RIDOT. Additionally, the rail freight carrier Genesee & Wyoming Railroad would benefit from the increased track capacity.

The remaining components of initiating intercity passenger rail at TF Green Airport are preliminary engineering, updating existing environmental documentation as needed, and construction. The PE effort will design the infrastructure necessary to bring intercity service to TF Green, including platform(s), a Track 4 siding, interlockings, catenary, crossovers, passenger station space, and pedestrian circulation between platforms. Both Amtrak and MBTA will use elements of this project.

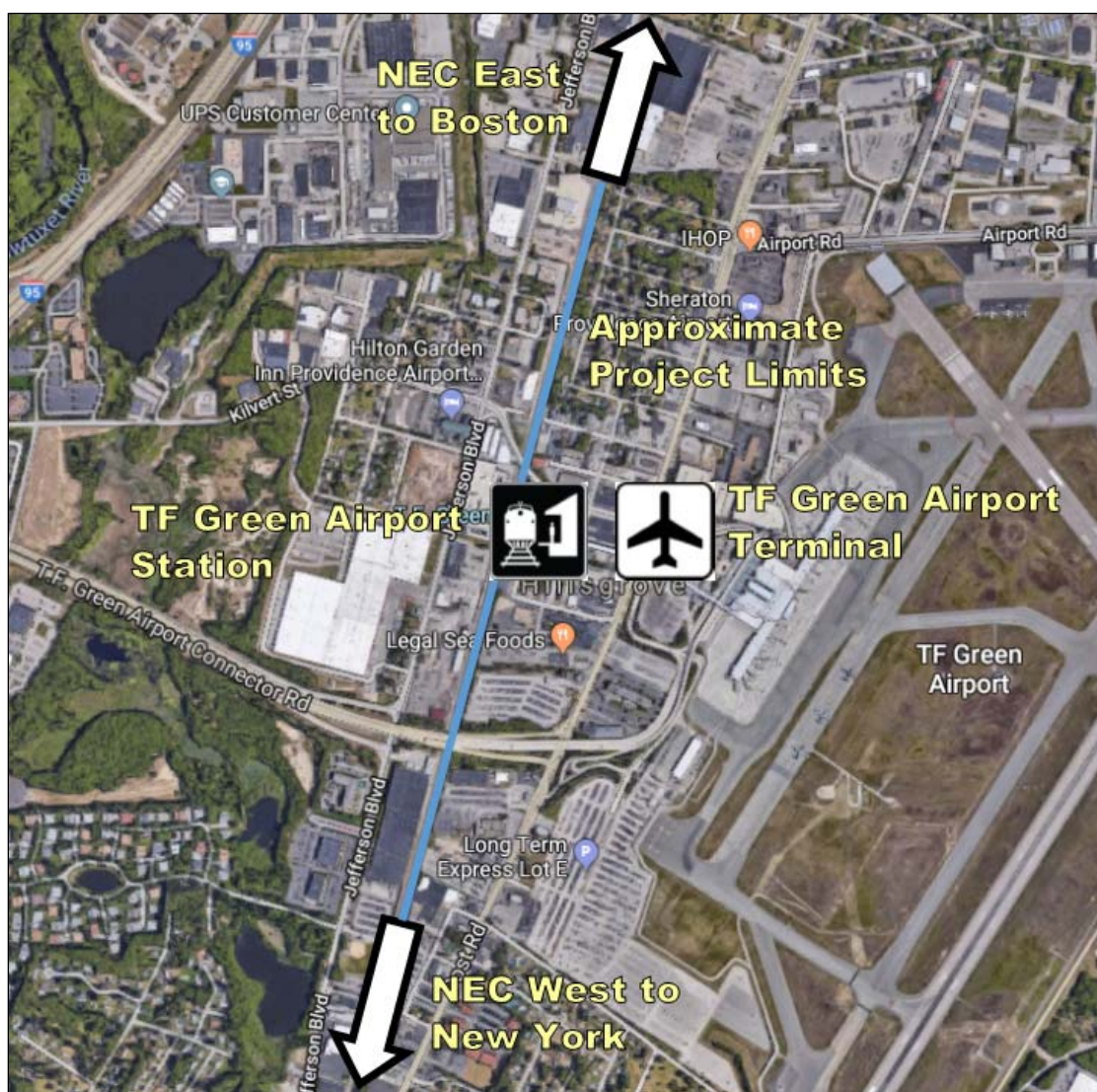
RIDOT is committed to measuring and meeting any performance objectives associated with this project. The following table identifies two proposed performance measures:

<sup>2</sup> <http://www.pvdairport.com/corporate/ri-airport-corporation/passenger-numbers>

Rail Measures	Unit Measured	Temporal	Primary Goal	Secondary Goal	Description
Passenger Counts	Count	Annual	Economic Competitiveness	Quality of Life	Count of the annual intercity boardings and alightings at stations within the project area
Track Miles	Miles	One Time	State of Good Repair	Economic Competitiveness	Number of track miles that exist within the project area

## VII. Project Location

TF Green Airport Station is located in Warwick, RI at Milepost 176.6 on the NEC. The airport terminal is an approximately ten-minute walk from the train station via an enclosed skyway. The limits of the project will be approximately 0.6 miles east and west of the station along the NEC. The Station and project limits are entirely within the RI-2 US Congressional District.





## VIII. Evaluation and Selection Criteria

### *Project Benefits*

A. Initiating intercity rail service at TF Green Airport will have positive effects on both system and service performance. Amtrak riders will have expanded options for accessing intercity service, and new riders will bring new fare revenue to the system. Beyond the benefits to riders at the new stop, the new sidings will increase the track capacity of the NEC and offer opportunities for express Acela service to overtake Northeast Regional trains in high-speed territory.

B. Collisions constantly occur along the Boston to New Haven section of I-95, causing preventable property damage, injuries, and fatalities. In 2015, there were 3,508 crashes and 7 fatalities on I-95 in Rhode Island alone. In Connecticut in 2015, there were 1,436 crashes and 34 people died on Route 95 between New Haven and the Rhode Island border.

According to a 2013 study in *Research in Transportation Economics*, traveling by train is almost 50 times safer than traveling in an automobile (0.15 fatalities per billion miles traveled versus 7.5). Implementing more passenger rail opportunities offers the public significantly safer mode choices to reach their destinations.

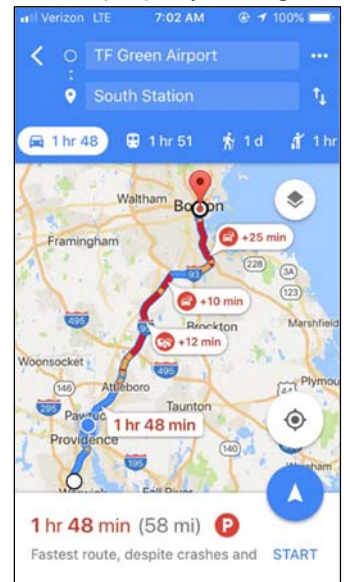
Existing commuter rail users traveling between TF Green Airport and Boston's South Station would see their travel time improved from 87 minutes to 54 – a decrease of 37.9% – by utilizing the new Amtrak service. Drivers from Warwick typically have morning commutes to Boston exceeding 90 minutes and sometimes reaching two hours. The more competitive travel time on intercity rail will lead to mode shift – a benefit to congestion levels, air quality, and worker productivity.

Additionally, by adding new sidings, trips times for Acela users will be more reliable as they'll take advantage of the opportunities to overtake the Northeast Regional trains in high-speed territory. This would be one of the few segments of the NEC in Southern New England where high-speed overtakes will be possible. Currently, due to limitations of track infrastructure, the shared services on the NEC regularly alter their schedules in an effort to respect other users. New areas for overtakes allows service to be more efficient and competitive.

C. There is no more efficient way to move people than transit. Unfortunately, much of TF Green Airport's catchment area does not have direct transit access to the terminal. Fortunately, the NEC does traverse through large portions of the catchment area. By building an Amtrak station at the airport, riders within TF Green Airport's market will then have access by the most efficient means of transportation.

The existing commuter rail station at TF Green Airport has the unique distinction of being the most integrated rail-to-air connection of anywhere on the Northeast Corridor. It is easy to move between the rail station and airport with the moving sidewalk located within the Interlink's skywalk.

In addition, major airports and highways in the Northeast are chronically congested with frequent delays that impede local and regional travel. A TF Green Amtrak station will provide a reliable travel option in case of delays at other airports in the region. Specifically, flights to/from Boston and TF Green to Newark, Philadelphia, and the three Washington, DC-area airports



Travel times between TF Green & Boston are unreliable and routinely longer than the approx. 90 min. commuter rail trip, especially in peak periods. Amtrak service between TF Green and Boston will nearly always be faster than driving.



Skywalk between the Interlink and airport terminal

can be supplemented by TF Green intercity rail connection.

D. While existing commuter rail service to the airport has provided much-needed mode choice for people within the vicinity, the limitations of the infrequent service inhibit the transportation network from meeting the demands of the traveling public. Rail travel from the airport connects north to Boston, but it does not make meaningful connections to the south. Further, the travel time to Boston via the diesel commuter rail service is not particularly competitive (although it performs better than auto travel during peak periods).

Implementing an Amtrak stop at the airport will meet the demand for users seeking to expand their geographic extents via a one-seat ride, as it will now connect as far south as Washington, D.C. via New York City. Additionally, the travel time to Boston will be much faster with Amtrak's electric trainsets. Demand for this service will increase as the development of the TOD district continues.



MBTA Passengers at TF Green

### *Technical Merit*

A. The proposed outcome of the project is an infill Amtrak Northeast Regional stop along the NEC in Warwick, Rhode Island. This stop will leverage existing commuter rail infrastructure to permit stops by Amtrak's electric service. The engineering project as defined by this application will result in a set of 30% plans and a completed NEPA document. Tasks leading up to these deliverables include: stakeholder meetings, computer aided design, and environmental review.

B. The project is ready to be advanced into preliminary engineering. The project has long been included in statewide and federal planning documents, and a feasibility study recommending the project was jointly completed and published by RIDOT, Amtrak, and the Federal Railroad Administration (FRA) in 2017.

C. RIDOT's Office of Transit has qualified personnel to handle the requirements of the PE/NEPA phase as well as the project's future construction. This office has managed many relevant construction efforts along the NEC, including a 21-mile freight track (2006), TF Green Airport's commuter rail station (2010), Wickford Junction commuter rail station (2012), track and platform improvements at Kingston Station (2018), and the ongoing Pawtucket/Central Falls commuter rail station project. Office of Transit project managers work with Amtrak almost daily on the latter project.

Additionally, as this project involves Amtrak service and the Amtrak-owned NEC right-of-way, highly-qualified Amtrak personnel will be involved in every step of the project. This includes environmental review from their environmental scientists, plan review from licensed engineers, and legal review by licensed law practitioners.

Each phase of the project will include consultant and/or contractor services. Both RIDOT and Amtrak have extensive experience in procuring highly qualified teams to assist with projects such as this.

D. There is much potential for private sector involvement once the station advances towards construction. The PE/NEPA phase will likely be limited to federal, state, and local collaboration, but for three critical reasons it is likely that the private sector could play a role in the station's development.



Track 3 looking south/west



First, RIDOT has demonstrated its interest and willingness to participate in a public private partnership (P3) for the development of transit facilities. During 2017-18, RIDOT has advanced procurement of a new intermodal facility near Providence Station via a P3. The project would include leveraging public funds designated for mass transit infrastructure to encourage private development within a special development district.

Secondly, TF Green Airport is located within a transit-oriented development (TOD) district – City Centre Warwick. City officials have implemented development-friendly zoning and a streamlined approval process to encourage mixed-use developments and is actively marketing the area to developers. The TOD district places the station location in an area that would attract private sector involvement. This year already, two nationally-recognized hotel operators purchased properties and one of the most preeminent dining groups in Southern New England purchased a restaurant. The restaurant is also the most successful adaptive reuse project in the TOD to date and all three of these properties are within walking distance of the rail station.



Covered walkway between the new Hyatt Hotel and the Interlink

Third, Amtrak has endeavored to encourage TOD around its stations as well. As commercial, residential, and institutional developments highly benefit from access to high-quality transit, it's reasonable to predict some level of private interest in the future construction project.

E. This PE/NEPA effort, as well as the future construction project, are well within the realm of RIDOT's capabilities. This capital project is similar to many projects that we've completed in the last fifteen years, including:

- Freight Rail Improvement Project (FRIP): RIDOT management from planning through NEPA (EIS) and construction; added 21 miles of track to the NEC (2006)
- Warwick Intermodal Station EA/FONSI (1999)
- Wickford Junction from planning through NEPA to design/build construction (2012)
- Pawtucket Station PE/NEPA (2017)
- Kingston Station Third Track and Platform Improvement final design and construction (2018)

RIDOT boasts a robust legal staff that has significant experience with rail-related projects. RIDOT and Amtrak legal staffs confer on a regular basis via standing, quarterly meetings between the agencies.

The finance staff at RIDOT is also well versed in projects of this magnitude as it coordinates the procurement of dozens of federally-funded, multi-million dollar infrastructure projects each year.

F. Constructing an Amtrak-accessible stop at TF Green Airport is consistent with local, state, and federal planning initiatives. At the local level, the City of Warwick included the stop in their 2013 Comprehensive Plan. The intercity service fits nicely into the vision they've created for their City Centre Warwick TOD district. At the state level, the stop has been prioritized in the Rhode Island State Rail Plan (2014) and is a key recommendation in the 2016 Rhode Island Innovates: A Competitive Strategy for the Ocean State report prepared by the Brookings Institution for Governor Raimondo. Additionally, this project has long been sought after by the Rhode Island Airport Corporation (RIAC), who own the airport. It was included in their 2002 Master Plan submission to the Federal



City Centre Warwick Vision (citycentrewarwick.com)

Aviation Administration. At the regional and federal level, the TF Green Airport Amtrak stop is included in the Northeast Corridor Commission's 5-Year Capital Investment Plan (FY2018-2022) and the FRA-led NEC Future's 2016 Preferred Alternative.

*"They can get big-city health care without going to Boston. There are not many communities that have a train station and an airport and [I-95]."*

-Kelly Coates, President of the Carpionato Group, a major developer in Rhode Island, discussing biomedical opportunities in the city of Warwick (Providence Business News)

### *Selection Criteria*

RIDOT is submitting this grant application with a competitive match, substantial net benefits, and the support of two quasi-public organizations and a development-friendly host city. This project will help spur private sector activity across a number of industries, including residential and commercial construction, aviation, hospitality, retail, and food and personal services. This activity will join the approximately \$50 million that the private sector is currently considering investing in City Centre Warwick. The underlying project's favorable Benefit-Cost Analysis (BCA) ratio of **2.51** clearly indicates that the net benefits of these grant funds will be maximized.

In addition, RIDOT plans to work with Amtrak to prioritize the use of contracted forces to expedite project delivery and ensure that funds are used in a cost-effective manner. RIDOT and Amtrak have already successfully used this innovative approach to project delivery together on the Kingston Third Track and Pawtucket/Central Falls Station projects.

A methodology for future operations and maintenance costs for the project's proposed assets is already established. As the assets will be a part of the NEC, costs will be determined through the Northeast Corridor Commission's (NECC) cost allocation methodology. This system, collaboratively established by the FRA, Amtrak, and partner states along the NEC, plans for equitable and reliable cost sharing to maintain the NEC in a state of good repair.

## **IX. Project Implementation and Management**

RIDOT will serve as the grantee and the primary contact to FRA. Amtrak will be responsible for contracting opportunities, procurement, and contract administration in consultation with RIDOT. Both Amtrak and RIDOT will work closely together in scope development and the execution and implementation of the agreed upon statement of work. The agencies will jointly develop a risk management plan and ensure conformance with Federal requirements for project progress reporting. RIDOT will be responsible for coordination with key stakeholders, including RIAC, the City of Warwick and other key environmental and regulatory agencies.

RIDOT and Amtrak have extensive experience collaborating with each other and RIDOT has much experience coordinating with the City of Warwick and RIAC. Both agencies are very qualified to lead PE/NEPA activities as well as future construction. Any and all coordination efforts will build upon the existing working relationships of these parties.

RIDOT and Amtrak have several recent relevant experiences managing and overseeing similar projects under oversight of FRA. With input and funding from RIDOT, the two agencies recently completed the 2017 *Feasibility Study for Intercity Rail Service to TF Green Airport* and recently commenced work on a more detailed analysis of the infrastructure and costs associated with bringing intercity service to TF



View of the Hyatt from the Interlink which opened in July 2018. The area to the left of the hotel is already approved for additional private-sector development.

Green. In addition, the two agencies recently completed the Kingston Station Third Track and Platform Improvement final design and construction project, which was partially funded with a \$26.2 million American Recovery and Reinvestment Act (ARRA)/FRA High Speed Intercity Passenger Rail grant. Amtrak is responsible for procuring and managing all three efforts. In addition, RIDOT obtained extensive FRA grant management responsibilities with the Kingston project.

## X. Planning Readiness

Bringing intercity Amtrak service to TF Green Airport was originally included in the 1999 Warwick Intermodal Station Environmental Assessment FONSI. Amtrak and RIDOT again renewed their commitment to initiating Amtrak service as Phase 2 of passenger rail at the Airport in the 2009 South County Commuter Rail track plans approved by these two agencies plus FRA, MBTA, and the P&W (now G&W) freight railroad. The 2002 TF Green Airport Master Plan Update partially bases its long term air passenger parking demand projection on the availability of Amtrak service in the future (see page III-43). The 2011 State Airport System Plan highlights that the lack of Amtrak service means “connections to southern Rhode Island and southeastern Connecticut will not be effectively served” (see page 05.7). Amtrak service at TF Green continued to be identified as a recommended investment in the 2014 Rhode Island State Rail Plan (see page 9-18) and in the *2017 Feasibility Study for Intercity Rail Service to TF Green Airport*. Although not included in the 2017 NEC Future Record of Decision, FRA included a TF Green Airport intercity station in the Preferred Alternative’s Service Plan (see pages BB-24 and BB-25).

The station is included in, and well-aligned with, local, state, and federal plans. A multitude of factors, including recent airport expansion and new TOD development, make this the right time to advance the project towards construction.



Typical traffic congestion on I-95 in East Lyme, CT.



Rail Transit Dashboard at the Hyatt Hotel (City of Warwick Planning)



## **Application Attachments**

Statement of Work (SOW)

Benefit Cost Analysis (BCA)

Supporting Documentation

Letters of Support

Forms

